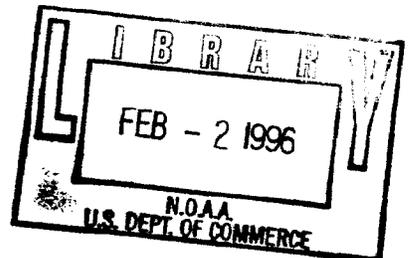


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MONTHLY WEATHER SUMMARY

Prepared and published by the
Caribbean Meteorological Institute
Husbands, St. James, Barbados W.I.

PART A
January to December
1993



National Oceanic and Atmospheric Administration

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Imaging Subcontractor
12200 Kilm Court
Beltsville, MD 20704-1387
March 28, 2002

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LIST OF STATIONS

COUNTRY	STATION	LAT. (N) DEG MIN	LONG. (W) DEG MIN	Alt. M
GRENADA	Calvigny	12 01	61 47	
	Mirabeau	12 08	61 49	
	Point Salines	12 01	61 43	7
ST. VINCENT	E. T. Joshua Airport	13 09	61 13	13
ST. LUCIA	Roseau Winban	13 56	61 02	
	Vigie Airport	14 01	61 00	2
DOMINICA	Canefield Airport	15 23	61 24	14
	Melville Hall Airport	15 35	61 18	14
ANTIGUA	V. C. Bird Airport	17 08	61 47	10
ST. KITTS	Golden Rock Airport	17 18	62 41	48
	National Agric. Corp.	17 18	62 43	

STATION MEASUREMENTS

STATION	SYNOP OBSERVATIONS	TEMPERATURE	HUMIDITY	WIND SPEED & DIRECTION	DAILY WIND MILEAGE	RAINFALL RAINFALL INTENSITIES	RAINFALL INTENSITIES	EVAPORATION	SUNSHINE	RADIATION
Calvigny		X				X			X	
Mirabeau		X	X		X	X			X	
Point Salines Airport	X	X	X	X		X				
E. T. Joshua Airport	X	X	X	X						
Roseau Winban		X	X		X	X		X	X	
Vigie Airport	X	X	X	X		X				
Canefield Airport	X	X	X	X		X				
Melville Hall Airport	X	X	X	X		X			X	
V. C. Bird Airport	X	X	X	X		X				
Golden Rock Airport	X	X	X	X						
National Agric. Corp.		X	X		X	X		X		

TABLE I - SUMMARY OF OBSERVATIONS AT FIXED HOURS 1993

COUNTRY STATION HEIGHT (above MSL)	MONTH HOUR	MEAN TEMPERATURE AND HUMIDITY				MEAN PRESS. REDUCED TO MSL hPa & tenths	MEAN WIND SPEED kt	TOTAL CLOUD AMOUNT (eights)					VISIBILITY IN km (No. of Obs)							
		WET BULB		VAPOUR PRESS. hPa & tenths	REL HUM & tenths			Number of observations					TO TO TO TO TO TO TO TO >							
		° C	° C					0	1,2	3-5	6,7	8	9	0.0	0.4	1.0	2.0	3.2	4.8	7.1
LST	° C	° C	hPa & tenths	hPa & tenths	AMT	MEAN	0	1,2	3-5	6,7	8	9	0.0	0.4	1.0	2.0	3.2	4.8	7.1	
GRENADA																				
Mirabeau	JAN	08	24.9	22.6	25.6	81	5.4	0	0	15	14	2	0	0	0	1.0	2.0	3.2	4.8	7.1
	FEB	08	24.9	22.4	25.6	84	5.7	0	0	13	14	1	0	0	0	1.0	2.0	3.2	4.8	7.1
143m	MAR	08	25.4	22.9	26.0	80	5.7	0	0	12	16	3	0	0	0	1.0	2.0	3.2	4.8	7.1
	APR	08	26.3	23.9	27.8	82	5.9	0	0	11	16	3	0	0	0	1.0	2.0	3.2	4.8	7.1
	MAY	08	27.2	24.9	29.8	83	5.9	0	0	11	17	3	0	0	0	1.0	2.0	3.2	4.8	7.1
	JUN	08	26.6	24.9	30.1	86	6.5	0	0	7	16	7	0	0	0	1.0	2.0	3.2	4.8	7.1
	JUL	08	26.4	24.8	29.9	87	6.0	0	0	10	17	4	0	0	0	1.0	2.0	3.2	4.8	7.1
	AUG	08	26.6	24.1	28.2	81	6.4	0	0	8	18	5	0	0	0	1.0	2.0	3.2	4.8	7.1
	SEP	08	26.8	24.9	30.1	85	5.9	0	0	12	14	4	0	0	0	1.0	2.0	3.2	4.8	7.1
	OCT	08	27.0	25.0	30.1	85	5.6	0	0	14	14	3	0	0	0	1.0	2.0	3.2	4.8	7.1
	NOV	08	25.9	24.1	28.6	86	6.3	0	0	11	12	7	0	0	0	1.0	2.0	3.2	4.8	7.1
	DEC	08	25.6	23.3	26.8	82	5.6	0	0	14	14	3	0	0	0	1.0	2.0	3.2	4.8	7.1

TABLE II - SUMMARY OF DAILY OBSERVATIONS 1993

COUNTRY STATION	RAINFALL (mm)				AIR TEMPERATURE °C				MEAN GRASS MIN °C	TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH								
	MONTH	TOTAL AMOUNT	MOST IN A DAY	DATE	DAYS WITH, OR GREATER THAN		MEAN MIN	MEAN MAX			MEAN (A+B)/2	EXTREMES		T	H	F	A	G	
					1.2	10.2						25.4	MAX						MIN
GRENADA																			
Calvigny																			
JAN	58.1	25.8	18	13	1	1	30.1	24.3	27.2	31	21	286.6	0	0	0	0	0		
FEB	61.2	15.2	14	9	3	0	30.3	26.6	28.4	31	25	258.9	0	0	0	0	0		
MAR	84.3	33.7	25	10	2	1	30.0	25.6	27.8	31	25	255.6	0	0	0	0	0		
APR	25.7	9.0	7	5	0	0	30.7	26.7	28.7	32	25	272.6	0	0	0	0	0		
MAY	76.5	27.4	13	11	3	1	31.3	27.6	29.4	32	26	265.3	0	0	0	0	0		
JUN	214.3	77.2	28	18	5	2	30.4	26.6	28.5	33	25	170.5	0	0	0	0	0		
JUL	178.3	76.2	9	20	4	1	29.9	26.5	28.2	33	25	205.6	0	0	0	0	0		
AUG	195.4	46.7	20	19	6	2	31.3	26.4	28.9	34	25	202.5	0	0	0	0	0		
SEP	184.2	51.4	12	16	6	2	31.9	26.1	29.0	33	25	215.0	0	0	0	0	0		
OCT	189.6	35.3	26	24	4	3	31.8	26.8	29.3	33	23	244.2	0	0	0	0	0		
NOV	357.2	76.7	2	23	10	5	30.4	23.7	27.0	32	0	200.7	0	0	0	0	0		
DEC	87.5	16.7	9	17	3	0	26.1	23.8	24.9	27	23	204.4	0	0	0	0	0		
Mirabeau																			
JAN	97.1	20.8	28	15	2	0	27.8	21.0	24.4	29	20		0	0	0	0	0		
FEB	24.3	10.5	12	5	1	0	27.9	20.3	24.1	30	17		0	0	0	0	0		
MAR	61.2	20.0	9	8	2	0	28.2	21.2	24.7	29	17	241.4	0	0	0	0	0		
APR	18.4	4.7	2	5	0	0	29.3	22.9	26.1	30	21	235.1	0	0	0	0	0		
MAY	125.8	24.0	29	18	3	0	29.8	23.6	26.7	31	22	229.6	0	0	0	0	0		
JUN	210.4	55.7	28	17	6	2	29.1	23.2	26.1	30	20		0	0	0	0	0		
JUL	213.2	51.4	9	16	7	2	29.1	23.0	26.0	30	22		0	0	0	0	0		
AUG	217.4	44.6	20	18	7	3	29.3	22.7	26.0	30	20	244.6	0	0	0	0	0		
SEP	281.0	61.6	12	18	9	3	29.2	22.6	25.9	31	18	227.5	0	0	0	0	0		
OCT	216.3	27.5	19	24	6	2	29.2	22.8	26.0	30	22	199.8	0	0	0	0	0		
NOV	371.9	72.6	7	17	11	5	28.1	22.5	25.3	29	20	164.3	0	0	0	0	0		
DEC	136.8	37.4	25	16	3	2	28.2	21.9	25.1	30	20	174.8	0	0	0	0	0		

TABLE II - SUMMARY OF DAILY OBSERVATIONS 1993

COUNTRY STATION	RAINFALL (mm)				AIR TEMPERATURE °C				TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH								
	MONTH	TOTAL AMOUNT DAY	MOST IN A DATE	DAYS WITH, OR GREATER THAN	MEAN MAX	MEAN MIN	MEAN (A+B)/2	EXTREMES		T	H	F	O	G				
								1.2							10.2	25.4	MAX	MIN
GRENADA Point Salines Airport	JAN	39.9	15.3	18	8	1	0	29.2	23.4	26.3	30	21	0	0	0	0	0	0
	FEB	27.8	16.6	19	5	1	0	29.3	22.8	26.0	30	21	0	0	0	0	0	0
	MAR	41.9	18.2	25	5	1	0	29.8	23.3	26.6	31	21	0	0	0	0	0	0
	APR	11.0	7.9	24	2	0	0	30.5	25.2	27.8	31	23	0	0	0	0	0	0
	MAY	30.3	13.7	13	6	1	0	31.1	25.9	28.5	32	24	0	0	0	0	0	0
	JUN	152.0	78.2	28	18	2	1	30.9	25.1	28.0	32	22	0	0	0	0	0	0
	JUL	120.9	42.8	9	15	3	1	30.3	24.6	27.5	32	22	0	0	0	0	0	0
	AUG	125.2	24.6	19	13	6	0	30.5	25.0	27.7	32	23	0	0	0	0	0	0
	SEP	127.7	21.5	11	16	5	0	30.8	24.9	27.9	32	23	0	0	0	0	0	0
	OCT	124.7	21.9	13	13	4	0	31.0	24.6	27.8	32	23	0	0	0	0	0	0
	NOV	267.2	63.8	16	16	7	3	30.0	24.1	27.1	32	23	0	0	0	0	0	0
	DEC	74.7	24.9	25	9	2	0	29.7	24.3	27.0	31	22	0	0	0	0	0	0

TABLE II - SUMMARY OF DAILY OBSERVATIONS 1993

COUNTRY STATION	RAINFALL (mm)				AIR TEMPERATURE °C						MEAN GRASS MIN °C	TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH						
	MONTH	TOTAL AMOUNT	MOST IN A DAY	DATE	DAYS WITH, OR GREATER THAN		MEAN MAX A	MEAN MIN E	MEAN (A+B)/2	EXTREMES			T	H	F	A	G		
					1.2	10.2				25.4								MAX	MIN
ST. LUCIA																			
Roseau Winban																			
JAN	243.5	33.4	8	23	10	3	28.4	21.6	25.0	30	18	0	0	0	0	0	0		
MAR	176.0	63.0	3	15	4	2	28.7	22.6	25.7	30	19	0	0	0	0	0	0		
APR	49.9	12.6	30	10	2	0	30.7	23.8	27.2	33	21	255.0	0	0	0	0	0		
MAY	177.1	39.7	27	15	6	2	30.8	24.5	27.7	32	22	228.1	0	0	0	0	0		
AUG	288.7	72.0	13	20	11	2		24.4			21	232.8	0	0	0	0	0		
SEP	254.0	66.7	12	18	8	3	31.3	24.0	27.6	32	20	222.6	0	0	0	0	0		
OCT	257.8	129.2	27	18	7	1	29.3	22.6	26.0	32	21	230.6	0	0	0	0	0		
NOV	163.6	27.1	24	21	7	1	27.3	21.8	24.6	30	20	220.8	0	0	0	0	0		
DEC	50.9	6.9	30	13	0	0		21.8			18	235.1	0	0	0	0	0		
Vigie Airport																			
JAN	190.2	25.5	8	21	6	1	28.3	22.5	25.4	30	21	0	0	0	0	0	0		
FEB	41.2	6.0	4	13	0	0	28.9	22.1	25.5	30	20	0	0	0	0	0	0		
MAR	133.4	56.0	3	15	4	1	28.8	23.2	26.0	30	21	0	0	0	0	0	0		
APR	35.0	16.8	30	7	1	0	30.9	24.7	27.8	32	23	0	0	0	0	0	0		
MAY	146.3	68.4	27	14	3	1	30.9	24.9	27.9	32	22	4	0	0	0	0	0		
JUN	108.8	43.8	16	14	2	1	30.6	25.9	28.2	33	23	1	0	0	0	0	0		
JUL	231.0	40.2	23	22	8	1	30.3	25.2	27.7	32	24	2	0	0	0	0	0		
AUG	158.9	39.4	14	20	5	1	30.6	24.9	27.8	32	22	0	0	0	0	0	0		
SEP	252.3	48.1	12	16	7	3	31.1	24.4	27.8	32	23	3	0	0	0	0	0		
OCT	239.3	77.1	27	18	3	3	30.7	24.7	27.7	32	22	2	0	0	0	0	0		
NOV	154.2	41.0	24	21	2	1	29.8	24.3	27.1	32	22	0	0	0	0	0	0		
DEC	44.3	7.4	10	13	0	0	29.4	23.9	26.7	30	22	0	0	0	0	0	0		

TABLE II - SUMMARY OF DAILY OBSERVATIONS 1993

COUNTRY STATION	RAINFALL (mm)				AIR TEMPERATURE °C						MEAN GRASS MIN °C	TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH					
	MONTH	TOTAL AMOUNT	MOST IN A DATE	DAYS WITH, OR GREATER THAN	MEAN		MEAN		EXTREMES				T	H	F	A	G	
					MAX	MIN	MAX	MIN	MAX	MIN								
																		A
1.2	10.2	25.4																
DOMINICA																		
Canefield Airport																		
JAN	179.1	38.0	7	20	4	1	28.6	21.5	25.0	30	19	0	0	0	0	0		
FEB	91.3	37.6	5	13	2	1	28.9	21.1	25.0	31	19	0	0	0	0	0		
MAR	46.3	20.1	15	6	1	0	30.0	22.1	26.0	31	19	0	0	0	0	0		
APR	46.5	25.2	18	7	1	0	31.5	22.9	27.2	33	21	0	0	0	0	0		
MAY	159.6	59.9	8	12	3	2	31.4	23.8	27.6	33	22	0	0	0	0	0		
JUN	129.3	23.3	20	17	4	0	31.1	26.2	28.6	32	24	0	0	0	0	0		
JUL	229.7	57.3	23	19	6	1	30.8	24.4	27.6	32	23	0	0	0	0	0		
AUG	163.0	20.0	6	19	6	0	30.9	24.1	27.5	32	23	0	0	0	0	0		
SEP	315.1	62.0	14	16	11	4	31.1	23.8	27.4	33	22	0	0	0	0	0		
OCT	137.5	41.8	9	16	2	1	31.0	23.6	27.3	33	22	0	0	0	0	0		
NOV	337.2	74.0	7	21	11	4	30.3	22.7	26.5	32	21	0	0	0	0	0		
DEC	66.4	12.3	5	13	1	0	30.1	22.2	26.2	31	21	0	0	0	0	0		
Melville Hall Airport																		
JAN	156.1	18.9	7	23	5	0	27.4	21.9	24.7	28	20	0	0	0	0	0		
FEB	170.3	30.2	5	19	4	3	27.7	21.4	24.6	29	19	0	0	0	0	0		
MAR	109.1	16.2	18	16	3	0	28.1	22.3	25.2	29	19	0	0	0	0	0		
APR	143.7	23.1	14	21	5	0	29.4	23.1	26.2	31	21	2	0	0	0	0		
MAY	541.5	213.2	8	20	11	6	29.7	23.5	26.6	31	21	7	0	0	0	0		
JUN	174.5	48.4	13	19	4	1	30.4	25.0	27.7	32	23	6	0	0	0	0		
JUL	210.9	38.1	27	20	6	2	30.4	24.8	27.6	32	21	1	0	0	0	0		
AUG	259.6	47.4	24	19	9	3	30.4	24.5	27.4	31	22	2	0	0	0	0		
SEP	465.1	161.2	14	22	13	4	30.5	23.9	27.2	32	22	8	0	0	0	0		
OCT	239.4	20.7	8	26	11	0	30.3	23.9	27.1	31	21	6	0	0	0	0		
NOV	375.3	55.2	18	25	11	5	29.4	23.2	26.3	30	20	201.5	0	0	0	0		
DEC	206.9	67.9	4	18	3	2	29.1	22.8	25.9	30	21	219.6	0	0	0	0		

TABLE II - SUMMARY OF DAILY OBSERVATIONS 1993

COUNTRY STATION	RAINFALL (mm)				AIR TEMPERATURE °C					MEAN GRASS MIN °C	TOTAL SUNSHINE DURATION HR	NO OF DAYS WITH						
	MONTH	TOTAL AMOUNT	MOST IN A DAY	DATE	DAYS W/TH, OR GREATER THAN		MEAN MAX A	MEAN MIN B	MEAN (A+B)/2			EXTREMES		T H U N D R E N	F O G	H A I L	G A L L E	
					1.2	10.2						25.4	MAX					MIN
ANTIGUA																		
V. C. Bird Airport																		
JAN	64.5	10.5	14	13	2	0	27.9	23.1	25.5	29	21	0	0	0	0			
FEB	12.9	4.8	22	4	0	0	28.3	22.4	25.3	30	18	0	0	0	0			
MAR	35.0	14.2	15	5	1	0	28.9	23.2	26.0	31	20	0	0	0	0			
APR	107.8	42.8	15	7	4	1	29.7	23.4	26.5	32	20	0	0	0	0			
MAY	324.9	55.5	25	15	9	5	29.6	24.0	26.8	31	22	0	0	0	0			
JUN	48.6	14.7	21	7	1	0	30.6	25.9	28.3	31	25	0	0	0	0			
JUL	139.6	46.6	2	12	3	2	30.7	25.8	28.2	31	23	0	0	0	0			
AUG	49.3	7.5	30	12	0	0	31.2	25.1	28.2	32	23	0	0	0	0			
SEP	56.6	14.4	9	11	2	0	31.5	25.1	28.3	33	23	0	0	0	0			
OCT	60.5	21.0	21	9	1	0	31.0	25.4	28.2	32	24	0	0	0	0			
NOV	37.2	7.6	28	9	0	0	30.4	24.5	27.5	31	21	0	0	0	0			
DEC	71.4	16.2	18	12	2	0	29.4	23.2	26.3	31	20	0	0	0	0			
ST. KITTS																		
National Agric. Corp																		
JAN	45.8	6.5	20	13	0	0	28.7	22.6	25.6	30	21	0	0	0	0			
FEB	50.1	29.7	3	7	1	1	28.9	22.1	25.5	30	20	0	0	0	0			
MAR	26.2	7.4	18	7	0	0	29.5	22.9	26.2	31	21	1	0	0	0			
APR	110.0	58.0	15	7	2	2	30.3	23.3	26.8	32	19	3	0	0	0			
MAY	112.9	33.5	23	14	2	1	30.5	24.2	27.3	33	21	3	0	0	0			
JUN	77.5	19.8	14	11	2	0	31.1	25.6	28.3	33	23	5	0	0	0			
JUL	69.2	18.6	25	11	2	0	31.2	25.6	28.4	33	24	1	0	0	0			
AUG	50.3	14.4	9	13	1	0	32.4	25.4	28.9	34	23	1	0	0	0			
SEP	124.5	31.7	6	17	3	1	31.5	25.0	28.2	33	22	3	0	0	0			
OCT	121.7	31.0	5	18	4	1	31.4	25.2	28.3	33	23	6	0	0	0			
NOV	57.4	9.7	11	13	0	0	30.6	24.5	27.6	32	22	0	0	0	0			
DEC	41.4	17.3	18	7	1	0	29.6	23.5	26.6	32	22	0	0	0	0			

TABLE III - SUMMARY OF AGRMETEOROLOGICAL OBSERVATIONS 1993

COUNTRY STATION	MONTH	RUN OF WIND (kilometers)		EVAPORATION (mm)			TOTAL RADIATION (MJ/M ²)		
		DAILY	MOST IN A DAY	TOTAL AMOUNT	MOST IN A DAY	DATE	TOTAL AMOUNT	MOST IN A DAY	LEAST IN A DAY

GRENADA

Mirabeau	JAN	87	209						
	FEB	47	71						
	MAR	111	197						
	APR	108	160						
	JUN	118	194						

ST. LUCIA

Roseau Winban	JAN	99	296	106.1	6.4	22			
	MAR	211	365	146.9	10.6	14			
	APR	250	361	152.5	9.2	25			
	MAY			143.5	8.3	20			
	AUG	189	506	164.9	11.3	18			
	SEP	151	281	127.7	10.0	29			
	OCT	171	278	132.1	6.5	15			
	NOV	182	308	101.8	6.4	26			
	DEC	183	284	107.6	5.2	5			

ST. KITTS

National	JAN			156.4	7.8	15			
Agric. Corp	FEB			169.1	8.3	25			
	MAR			236.9	9.5	23			
	APR			209.8	9.5	3			
	MAY			182.3	8.7	21			
	JUN			217.5	10.7	10			
	JUL			241.2	9.5	31			
	AUG			241.9	10.9	21			
	SEP			189.9	13.0	2			
	OCT			196.1	9.2	30			
	NOV			183.6	9.3	9			
	DEC			155.0	6.9	7			

TABLE V - SUMMARY OF WINDSPEED RECORDS 1993

COUNTRY STATION	MONTH	HIGHEST HOURLY WIND (kt)				HIGHEST GUST (kt)				NO. OF HOURS WITH GUST EXCEEDING			MEAN WIND SPEED kt
		DIRN	SPEED	HOUR ENDED	DATE	DIRN	SPEED	TIME LST	DATE	33	47	63	
ST. VINCENT													
E.T. Joshua Airport	JAN	12	22	16	10	15	34	0325	9	1	0	0	12.3
	FEB	11	18	21	10	11	34	2025	10	1	0	0	10.2
	MAR	11	19	11	20	11	33	0915	26	0	0	0	12.2
	JUN	11	20	12	25	15	33	0745	20	0	0	0	12.0
	JUL	11	20	13	12	10	30	0400	9	0	0	0	10.8
	AUG	8	20	18	19	8	51	1710	19	1	1	0	10.0
	SEP	10	20	13	12	10	42	1020	11	2	0	0	9.8
	OCT	12	16	11	26	12	30	1005	26	0	0	0	9.8
	NOV	10	17	8	7	12	33	0730	7	0	0	0	9.8

